

## historical quarterly

## Contents

FALL 1983/VOLUME 51/NUMBER 4

IN THIS ISSUE	307
"MOUNTAIN COMMON LAW": THE EXTRALEGAL PUNISHMENT OF SEDUCERS IN EARLY UTAH KENNETH L. CANNON II	308
RECLAMATION OF YOUNG CITIZENS: REFORM OF UTAH'S JUVENILE LEGAL SYSTEM, 1888-1910 Martha Sonntag Bradley	328
THE BASIS OF MINING PROPERTY RIGHTS IN NINETEENTH-CENTURY UTAH: THE CASE OF THE RUSH VALLEY DISTRICT	
"TO GET U[TAH] IN U[NION]": DIARY OF A FAILED MISSION EDITED BY V'ILLIAM C. SEIFRIT	358
BOOK REVIEWS	382
BOOK NOTICES	391
INDEX	393

THE COVER A downtown landmark for nine decades, the Salt Lake City and County Building represents the best example of Romanesque Revival architecture in Utah. Designed by Monhom, Bird, and Proudfoot, it has housed local government officials since 1894, and until the completion of the Capitol it also served the needs of state government. It is listed in the National Register of Historic Places. City engineer's photograph, July 18, 1905, in USHS collections.

© Copyright 1983 Utah State Historical Society

## The Basis of Mining Property Rights in Nineteenth-century Utah: The Case of the Rush Valley District

BY KEITH A. KELLY

An excerpt from Utah history provides important insights into the forces that determined property rights to Utah's early mines. The illustrative case occurred in the Rush Valley Mining District, located about thirty-eight miles southwest of Salt Lake City in Tooele County. Organized on June 11, 1864, by U.S. soldiers stationed in Utah during the Civil War, the district experienced social and economic changes in its early years that produced unusual modifications in its mining property right rules. Miners in the district were able to make these changes because early western mineral property law was not legislated; it was locally determined according to strong customs developed by western miners. This article will examine the origin of Utah mining law in those western mining customs and look at the Rush Valley story as a deviation from mining tradition. It will also suggest that these pervasive mining customs ultimately proved efficient in allocating mining property rights in Rush Valley.

Mr. Kelly, a Stanford Law School student, wrote this article while attending Brigham Young University. He appreciates the helpful advice he received from James R. Kearl, Leonard J. Arrington, and J. Kenneth Davies in its preparation.

Hidden Treasure outcrop near Ophir in Rush Valley showing early mining methods. USHS collections.



Originally, during the Civil War, the mines in Rush Valley were considered the most valuable in Utah, but when they were first worked they did not profit their owners because of lack of economical transportation for ore out of the territory. When the war ended the soldiers amended their local mining bylaws to make themselves perpetual owners of the mines, even though they were returning to California. Many historians assert that this action prevented development of mines in the district when the railroad made mining feasible.'

But research indicates the Rush Valley mines were worked when the Utah Central Railroad made them valuable. One of the main reasons for this was that the custom-based, early mining property rights dictated that mines must be worked to be held as property. The Rush Valley case illustrates the power of these customs to dictate property rights. Even though rights were explicitly determined by mining district bylaws, they were subject to the customs they were based on.

When the first mineral discoveries were made in the West, there was virtually no state or federal legislation to protect mining property rights. Because of this, miners banded together to form mining districts that protected their claims. Whenever a major strike occurred, a mining district was usually organized immediately. The miners gathered to write up a code of bylaws that specified district boundaries, claim location rules, size of an area that could be claimed, work required to maintain a claim, and claim recording procedures. At the same time, a district secretary was elected to record the status of all claims, and specific procedures were given for changing the bylaws. Some districts even drafted rules that punished thieves, murderers, and claim jumpers.<sup>2</sup>

Although each district was free to form its own laws, a pervasive custom emerged in the West that defined mining property rights by their use. This is described by nineteenth-century historian Charles H. Shinn, who extensively analyzed mining camp history:

The laws of the hundreds and thousands of camps that grew and decayed in the Pacific coast region, differing though they did in many

Orson F. Whitney, History of Utah, 4 vols. (Salt Lake City: George Q. Cannon & Sons Co., 1893), 2:272; Bert S. Butler et al., Ore Deposits of Utah (Washington, D.C.: U.S. Geological Survey, 1920), p. 363; T. B. H. Stenhouse, Rocky Mountain Saints (New York: D. Appleton & Co., 1873), p. 716; Leonard J. Arrington, "Abundance from the Earth: The Beginnings of Commercial Mining in Utah," Utah Historical Quarterly 31 (1963): 204.

<sup>&</sup>lt;sup>2</sup>Rocky Mountain Mineral Law Foundation, ed., The American Law of Mining, 5 vols. (San Francisco: Matthew Bender, 1980), 2:22-23.

particulars, all agree in recognizing discovery and appropriation of mineral property as the source of title; and development by use and working as the condition of continued possession.<sup>3</sup>

Thus, mining in California, and later throughout the West, became based on a system of mining claim location and annual assessment. Under these rules anyone could locate a mining claim by simply staking it out and reporting it to the district recorder. In order to maintain his location the miner had to fulfill an assessment, an annual work requirement on his claim. Along with this, a rule usually limited each miner to a small section of placer ground or one small claim on each vein of ore.

This system became an entrenched custom in the West. By 1866, when Congress enacted its first law that dealt with western mining, more than 1,100 mining districts had already enacted location and assessment laws.

It is not surprising, then, that this widespread custom was followed when the first mining district was organized in Utah. That event occurred September 17, 1863, when miners organized the West Mountain Mining District to regulate mining in the mountains west of Salt Lake City. The new district's bylaws included the limitation that a miner could locate no more than one 200-foot claim on each mineral vein and that he must do "one faithful day's work" on his claim each month in order to prevent the claim from being jumped. This system of regulation was eventually adopted in all early Utah mining districts.<sup>5</sup>

This location-assessment system became widespread because it was efficient — it permitted allocation of mineral resources to individuals who exploited them. There were several reasons for this efficiency.

First, the system brought low transactions costs in locating and relocating claims. When a miner found a vein of valuable ore on public land, he did not have to go through a long process of obtaining an official deed to the land from the government. He simply staked out his claim and reported the action to his district recorder. If the locator failed to develop his claim, it was automatically opened for relocation. The potential relocator was free to prospect to find abandoned claims. In this way he acted as the costless administrator

<sup>&</sup>lt;sup>3</sup>Charles Howard Shinn, Mining Camps: A Study in American Frontier Government (1885; reprint ed., New York: Alfred Knopf, 1948), p. 223.

<sup>&</sup>lt;sup>4</sup>Ibid., p. 225.

<sup>&</sup>lt;sup>5</sup>Arrington, "Abundance from the Earth," pp. 196-98.

of the system. The relocator made sure that whenever a titleholder failed to work his claim, he was in danger of losing it.

Second, the location-assessment system forced mine owners to recognize land values. If the land title was given to those who did not exploit the minerals on it, miners could legally have claimed large areas of land and left them unexploited, even though the land might have yielded large profits to its owners. With regulations that forced owners to work the land, mining property could be held only by those who actually knew the land's worth. Because of uncertainty in estimating the value, size, and length of ore-bearing veins, it was virtually impossible to tell the full value of mining land without working it. Miners claiming large tracts of land without working them would have prevented society from fully ascertaining the value of its mineral resources.

Third, the location-assessment system provided incentive to individual miners. When a miner knew he could have title to land by simply finding precious metals on it, he had a strong encouragement to search for new ore-bearing veins. At the same time, the system encouraged men to fully exploit recognized mining discoveries. Since each individual could claim only a limited amount of ground, there was room for other miners to come in and exploit areas already shown to be valuable.

Thus, the mining land allocation system originally adopted in Utah was simple and efficient. But it did not always remain that way. Miners were not required to follow western customs in drafting their local regulations. So when an unusual turn of events occurred in the Rush Valley Mining District, the miners there were free to adopt bylaws that restricted mining in the area.

The story of the Rush Valley Mining District began when Col. Patrick E. Connor was sent to Utah during the Civil War with a detachment of California and Nevada volunteers. Connor, the commander, was an Irishman who had performed well as a soldier during the Mexican War, but he had left the army to mine and settle in California. When the Civil War broke out, he left his business to volunteer for the service. On August 6, 1862, he assumed command of the Military District of Utah and led his detachment across the Great Basin to Salt Lake City.

<sup>&</sup>lt;sup>6</sup>Earl M. Wunderli, "Annual Assessment Work as Notice to Prospectors," Utah Law Review 6 (1959): 391-405.

<sup>&</sup>lt;sup>7</sup>Gary L. Watters, "Utah Territory," Journal of the West 16 (April 1977): 49.



Patrick E. Connor stimulated Utah mining. USHS collections.

The volunteers were assigned to protect the mail route, subdue Indian tribes in the area, and to keep an eye on the Mormons. They established Camp Douglas in Salt Lake City, but after a few confrontations with the Indians, found they had little to do. Instead of letting his troops stidle, Connor encouraged his men, many of them former forty-niners, to prospect for gold and silver. Several discoveries were made; so by 1864 when troops were sent to establish a post near the present site of Stockton, Utah, they were eager to comb the countryside for minerals. By June of that year the soldiers' success in the area led them to organize the Rush Valley Mining District from its parent West Mountain District."

The bylaws were similar to those drafted earlier in the territory. They included a limit of 200 feet for each claim along each vein, a one-claim-per-vein limit, and a "one faithful day's work" per month assessment. In addition to this, there was a provision for patenting claims. When a miner had spent \$300 developing a claim, it was agreed to be his permanently and not subject to an assessment requirement. This rule was designed to promote long-term investment in mines."

The Rush Valley District became the biggest boom area in Utah. More than 500 claims were made as soldiers searched the hills.

\*Stenhouse, Rocky Mountain Saints, pp. 714-15.

"U.S. Bureau of Census, The United States Mining Laws (Washington, D.C.: U.S. Government Printing Office, 1885), p. 620.

Utah Historical Quarterly 1983 Vol 51 No.4: 350-351



Connor named Stockton in Rush Valley after his California home. Building housed stage office. USHS collections.

Officers at Camp Douglas organized the Rush Valley Smelting Company to process ore from the mines, and in 1864 Connor supervised the first major precious metal smelting furnace in Utah Territory. Soon after this furnace was completed, several others were started to process the ore being mined. The same year, the Knickerbocker and Argenta Mining and Smelting Company was organized in New York City to direct capital to the mining operations in the area. In 1864 and 1865 this company alone spent \$100,000 developing the mines.

By the late summer of 1865 the boom had ended. The Californians were unable to make their smelters pay. They suffered from a lack of the technology needed to process the ore, shortages of charcoal for their furnaces, high mining costs (powder was \$25 a keg, and tunneling cost \$60 a foot), and high transportation costs. The Knickerbocker and Argenta Company was bankrupt; mining activity ground to a halt.<sup>10</sup>

At the same time, the end of the Civil War brought the discharge of the volunteers from the army. Though most of the soldiers were ready to return to their homes in California and Nevada, they wanted to hold on to their mining claims, should they wish to work them in the future. With an eye ahead, the soldier-miners eliminated

<sup>&</sup>lt;sup>16</sup>John R. Murphy, The Mineral Resources of the Territory of Utah (Salt Lake City: James Dwyer, 1872), pp. 2-3.



Patrick E. Connor stimulated Utah mining. USHS collections.

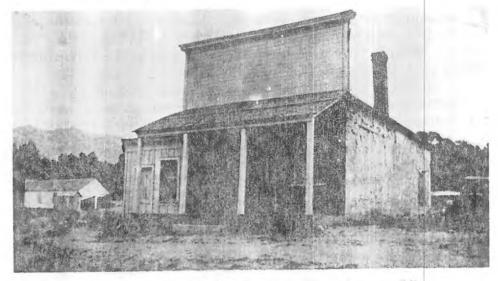
The volunteers were assigned to protect the mail route, subdue Indian tribes in the area, and to keep an eye on the Mormons. They established Camp Douglas in Salt Lake City, but after a few confrontations with the Indians, found they had little to do. Instead of letting his troops sit idle, Connor encouraged his men, many of them former forty-niners, to prospect for gold and silver. Several discoveries were made; so by 1864 when troops were sent to establish a post near the present site of Stockton, Utah, they were eager to comb the countryside for minerals. By June of that year the soldiers' success in the area led them to organize the Rush Valley Mining District from its parent West Mountain District.

The bylaws were similar to those drafted earlier in the territory. They included a limit of 200 feet for each claim along each vein, a one-claim-per-vein limit, and a "one faithful day's work" per month assessment. In addition to this, there was a provision for patenting claims. When a miner had spent \$300 developing a claim, it was agreed to be his permanently and not subject to an assessment requirement. This rule was designed to promote long-term investment in mines."

The Rush Valley District became the biggest boom area in Utah. More than 500 claims were made as soldiers searched the hills.

Stenhouse, Rocky Mountain Saints, pp. 714-15.

<sup>&</sup>lt;sup>8</sup>U.S. Bureau of Census, *The United States Mining Laws* (Washington, D.C.: U.S. Government Printing Office, 1885), p. 620.



Connor named Stockton in Rush Valley after his California home. Building housed stage office. USHS collections.

Officers at Camp Douglas organized the Rush Valley Smelting Company to process ore from the mines, and in 1864 Connor supervised the first major precious metal smelting furnace in Utah Territory. Soon after this furnace was completed, several others were started to process the ore being mined. The same year, the Knickerbocker and Argenta Mining and Smelting Company was organized in New York City to direct capital to the mining operations in the area. In 1864 and 1865 this company alone spent \$100,000 developing the mines.

By the late summer of 1865 the boom had ended. The Californians were unable to make their smelters pay. They suffered from a lack of the technology needed to process the ore, shortages of charcoal for their furnaces, high mining costs (powder was \$25 a keg, and tunneling cost \$60 a foot), and high transportation costs. The Knickerbocker and Argenta Company was bankrupt; mining activity ground to a halt.<sup>10</sup>

At the same time, the end of the Civil War brought the discharge of the volunteers from the army. Though most of the soldiers were ready to return to their homes in California and Nevada, they wanted to hold on to their mining claims, should they wish to work them in the future. With an eye ahead, the soldier-miners eliminated

<sup>&</sup>lt;sup>10</sup> John R. Murphy, The Mineral Resources of the Territory of Utah (Salt Lake City: James Dwyer, 1872), pp. 2-3.

			**	
	•			
	A. Sarry March			
			314	4.
	Y a track of the			
MARK WA	*			
The state of		Constant Afficial Section 1997.		
A Commence				
	4			
	A			
T. 1				
		9,1		
	1.0	Ã,		i k
	:			
	<b>1</b>			

Connor ah mining. 'ections.

e, subdue ons. They few connstead of y of them veral disstablish a r to comb soldiers' y Mining

territory. ch vein, a er month patenting m, it was



Connor named Stockton in Rush Valley after his California home. Building housed stage office. USHS collections.

Officers at Camp Douglas organized the Rush Valley Smelting Company to process ore from the mines, and in 1864 Connor supervised the first major precious metal smelting furnace in Utah Territory. Soon after this furnace was completed, several others were started to process the ore being mined. The same year, the Knickerbocker and Argenta Mining and Smelting Company was organized in New York City to direct capital to the mining operations in the area. In 1864 and 1865 this company alone spent \$100,000 developing the mines.

By the late summer of 1865 the boom had ended. The Californians were unable to make their smelters pay. They suffered from a lack of the technology needed to process the ore, shortages of charcoal for their furnaces, high mining costs (powder was \$25 a keg, and tunneling cost \$60 a foot), and high transportation costs. The Knickerbocker and Argenta Company was bankrupt; mining

the assessment requirement from their bylaws and rewrote their rules to include a provision allowing them to hold their mines perpetually. Meeting on March 4, 1865, they added the following to their district regulations:

Whenever a mound of stone three feet in diameter on the ground and two feet high, shall be erected having a permanent notice posted thereon, naming the lode and company, and the sum of three cents per foot shall have been expended upon the claims of any company of this District, the ground so claimed by said company shall be deemed as belonging in fee to the owners and their assigns, and the same shall not be subject to relocation by other parties ever after.

Since most claims were 200 feet long, the new bylaws meant that a soldier who put \$6.00 into his claim could hold it for life. With this regulation added to the local mining code, the volunteers disbanded and headed for home.

Some mining historians have asserted that these self-interested actions delayed development of the Rush Valley when the Utah Central Railroad made mining feasible in 1870. Referring to the soldiers' rewriting of their local bylaws, Orson F. Whitney wrote in his History of Utah: "This action, preventing as it did all subsequent relocation of the same ground, greatly retarded, and in fact prevented for some years the development of the mines in the Rush Valley District." Bert S. Butler, writing for the U.S. government in The Ore Deposits of Utah, also subscribed to this view.13 T. B. H. Stenhouse, in Rocky Mountain Samts, quoted an early mining historian's account reporting that the soldiers' actions "resulted in the greatest injury to the cause which had its rise in their energy and determination." Because of the 1865 bylaws, the account added, "the mines of Stockton long lay under a ban, and it is only since the wonderful discoveries made in neighboring canyons, that mining has been energetically resumed there."14

It is apparent, however, that the bylaws could have delayed efficient development of the area for no more than two years. It was not feasible to work the mines until the Utah Central Railroad was completed in January 1870, and in 1872 Congress enacted legislation that mandated annual assessment work on all mining claims. This legislation would have voided the 1865 Rush Valley bylaws. 15

<sup>11</sup> The United States Mining Laws, p. 621.

<sup>12</sup> Whitney, History of Utah, 2:272.

Butler et al., Ore Deposits of Utah, p. 363.

<sup>14</sup>Stenhouse, Rocky Mountain Saints, p. 716.

<sup>15</sup>The United States Mining Laws, pp. 53-55.

heir ber-

t a his ed

ed the in teh

Research reveals several problems with this version of the Rush Valley story. Existing court histories show that local mining regulations were held valid only when they reflected the customs of those in the mining district. In his nineteenth-century study of western mining camps, Charles Shinn explained that courts generally held that mining customs were "allowed to take precedence over written district laws" when those laws were "disregarded or long neglected." He went on to explain that district bylaws had no binding power on the miners beyond the point that they were generally accepted. They were not imposed on society; they were agreed upon. This is the way the courts viewed them. Shinn stated:

What gives district laws their authority is not their mere enactment, but the obedience and acquiescence of the miners following upon their enactment; and a custom in itself reasonable and generally observed ought certainly to take precedence over a generally ignored strict written law. The moment a district law falls into disuse, it is void.<sup>18</sup>

Thus, the 1865 Rush Valley bylaws were valid only because the miners in Rush Valley at that time agreed to them. The soldiers who made perpetual claim to their mines could expect to keep them only if a majority of the miners who later came to Rush Valley agreed to that idea. It is not clear whether the 1865 miners realized this; if they did, their rule change may have been only a hopeful gesture, made with a recognition that it might be eventually overturned.

Whatever the vounteers' intentions, history took its course. As one might expect, the coming of the railroad meant increased opportunity to open the Rush Valley mines to full development, and later miners who entered the district had the incentive to change the 1865 perpetual-claim laws.

Several sources indicate that the Rush Valley mines were exploited in the early 1870s. Part of this development came when some of the original claimants returned to Utah to work their mines. One of them was Patrick Connor, who in 1866 refused a promotion in the Army to return to Stockton, Utah, to resume his mining interests. The seems likely that other soldiers returned at that time to work with their former commanding officer.

Later, the coming of the railroad induced more of the volunteers to return. John Murphy, a historian who gave a first-hand

<sup>16</sup>Shinn, Mining Camps, p. 260.

<sup>17</sup>Fred B. Rogers, Soldiers of the Overland (San Francisco: Grabhorn Press, 1938), pp. 251-52.

account of the mines, indicated in 1872 that several of the California Volunteers had returned to work their claims:

Many of the original locators of the West Mountain and Rush Valley Districts returned in the years 1869 and 1870, and renewed operations on their old locations. They entered into combination with capitalists for the development and practical working of their interest, and soon erected suitable reduction works.<sup>18</sup>

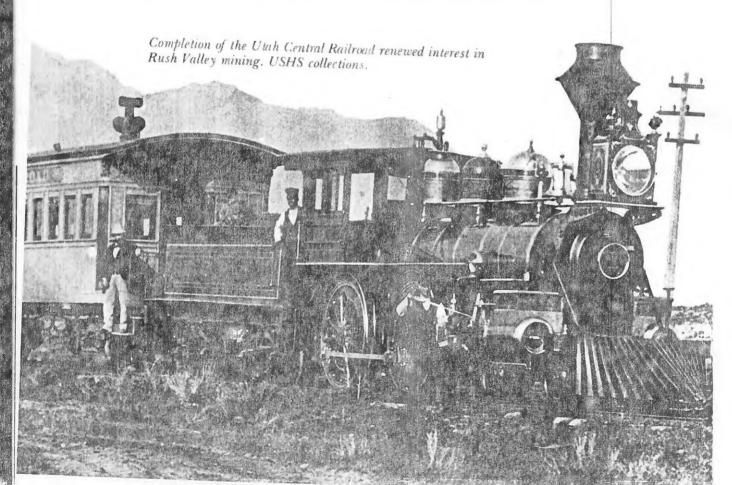
Even the locations that were not reclaimed by Connor's men were opened for development. Apparently missed by Whitney and other writers was an 1880 census report of the Rush Valley district indicating that the California Volunteers' restrictive bylaws were overturned on May 12, 1870:

In May, 1870, there were 850 locations on the books of the Rush Valley district, but most of the titles had lapsed. At that time a party of miners came from White Pine Nevada, reorganized the district, and jumped everything.

Although this report may be slightly inaccurate (could a small group of miners "jump everything" when there were over 500

18Murphy, Mineral Resources of the Territory, p.5.

<sup>19</sup>U.S. Bureau of Census, Statistics and Technology of the Precious Metals (Washington, D.C.: U.S. Government Printing Office, 1885), p. 447.



claims?), it suggests that the Rush Valley bylaws were changed by 1870, shortly after the coming of the railroad to Salt Lake City made it feasible to mine. A check of mining bylaw records verifies in May 1870 new local regulations were drafted by a committee of five, and that twenty-two miners voted to elect a new recorder and unanimously to adopt new rules. These new bylaws imposed an annual assessment requirement on all claims and thus opened up the Rush Valley mines for relocation. Since local mining laws had their basis in custom rather than statutory force, this change was perfectly acceptable.

It was also acceptable for miners to form a new district (with new bylaws) within the borders of the original Rush Valley District. A new district was formed when high-grade ore deposits were discovered in Ophir Canyon, at the southern end of Rush Valley. With the discovery of valuable ore, miners came from many regions to stake their claims. On August 6, 1870, soon after the discoveries were made, miners agreed to new bylaws that required annual assessment work on the mines. Their rules also required a fifty-cent fee for miners to transfer their claims from the Rush Valley records to the Ophir District books. If a miner was not there to transfer his claim to the new district's records, it must have lapsed as a matter of course. 21

John R. Murphy reported that forty claims made by Connor's men in 1864-65 were in the new district; and he wrote in 1872 that, with the flood of relocators, "litigation would seem inevitable between the claimants of the old and new rights by location." Court records dealing with those specific cases are nonexistent, but custom dictated that the relocations would have been held valid.

One such relocation in the Ophir District was noted in *The Ore Deposits of Utah*:

The Hidden Treasure mine is situated on a steep hillside above and three-quarters of a mile northeast of Jacob City. It was located in 1865 as the St. Louis lode by Gen. Connor's soldiers, who had been told by Indians of the outcropping boulders of galena. Little work was done until April, 1870, when it was relocated as the Hidden Treasure.

The account goes on to state that the mine had produced several thousand tons of ore by 1874.23

<sup>20</sup>The United States Mining Laws, pp. 622-23.

<sup>&</sup>lt;sup>21</sup>Ibid., pp. 651-52.

<sup>&</sup>lt;sup>22</sup>Murphy, Mineral Resources of the Territory, p. 5.

<sup>23</sup> Butler et al., Ore Deposits of Utah, p. 367.

Given the excitement caused by the ore discoveries and the customs dictating that mining property rights came only through use, it must have been impossible for one of Connor's men to return to his 1865 Ophir Canyon claim after 1870 and expect to repossess it. Murphy explained:

The discovery of rich chloride ores in Ophir Canyon district assaying very commonly from \$500 to \$5000 per ton, added to the success attending the explorations of the Cottonwood mines, caused a large influx of the old pioneer class of explorers and prospectors from Nevada, California, Montana, Idaho, and Colorado; the result of which was the discovery of many really valuable mining properties.<sup>24</sup>

Clearly, when it became profitable to work the mines, the 1865 bylaws were no more than a temporary obstacle. As the 1880 census report reveals, interest in Rush Valley rose and fell according to the mineral finds made there:

Very little was done in the district until 1875, when there was quite an excitement. It gradually died out, however, until 1879, when the large ore body in the Great Basin mine was discovered. Except at the above mine little is being done.<sup>25</sup>

The Rush Valley scenario shows that early Utah mining regulations had their basis in custom. They came into existence because they were needed and accepted. They lasted as long as a consensus supported them. When a small group of soldier-miners tried to redefine property rights contrary to the custom of efficient usage, the men were ultimately overruled by those who respected generally held custom.

Ultimately, the roots of property rights lie in the accepted norms of the society that creates them. When those norms become widely established, they usually find their way into legal codes. As one legal theorist put it, "Custom is a law creating procedure in the same sense as legislation." Because western mining customs were pervasive and provided efficient allocation of mining resources long before Congress acted on the question, they formed the basis for law.

In the end, new technology, and not new mining laws, opened the Rush Valley mines to full development. As more sophisticated mining and processing techniques were developed, the Rush Valley

<sup>24</sup> Murphy, Mineral Resources of the Territory, p. 5.

<sup>25</sup> Statistics and Technology of the Precious Metals, p. 447.

<sup>&</sup>lt;sup>26</sup>Hans Kelsen, General Theory of Law and State, trans. Anders Wedberg (New York: Russell and Russell, 1961), p. 128.

area became a steady producer of gold, silver, copper, and lead. After the surface ores were expended, mining companies exploited the ore deposits underground. By 1889 there were 11,500 feet of openings, and miners were working 660 feet below ground level. At the beginning of the twentieth century miners moved deeper when the Bullion Coalition Company constructed a drain tunnel that allowed it to exploit even lower deposits of ore. With this intensified development of the area, the Ophir and Rush Valley districts had produced over \$31 million in precious metals by 1917 and gained an important position in Utah's mineral producing community.<sup>27</sup>

<sup>&</sup>lt;sup>27</sup>Butler et al., Ore Deposits of Utah, pp. 364, 370-74; Fred H. Perkins, "Geology of Stockton Mining District," Salt Lake Mining Review, December 30, 1902, pp. 58-59.